EXHIBIT G

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

- - -

IN RE: NATIONAL PRESCRIPTION OPIATE LITIGATION	:	HON. DAN A. POLSTER
APPLIES TO ALL CASES	:	NO. 1:17-MD-2804

- HIGHLY CONFIDENTIAL -

SUBJECT TO FURTHER CONFIDENTIALITY REVIEW

- - -

April 29, 2019

- - -

Videotaped deposition of KATHERINE KEYES, Ph.D., taken pursuant to notice, was held at the law offices of Lieff Cabraser, LLP, 250 Hudson Street, New York, New York beginning at 9:08 a.m., on the above date, before Michelle L. Gray, a Registered Professional Reporter, Certified Shorthand Reporter, Certified Realtime Reporter, and Notary Public.

- - -

GOLKOW LITIGATION SERVICES
877.370.3377 ph | 917.591.5672 fax
deps@golkow.com

Page 366

in your report?
A. So as I mentioned in the report, there are other programs and policies that counties have -- have developed, have considered. I think there's different levels of evidence for them. I felt that these three in particular had a solid evidence base for -- again, not exhaustive. But these three are three really solid ways to reduce opioid use disorder and morbidity and mortality that have evidence associated with them.
Q. Did you think that these three were the ones that had the best evidence bases that you were aware of?
A. I would --
MS. RELKIN: Objection to form.
You can answer.
THE WITNESS: I -- I was not asked to evaluate the best policies and programs. I was asked to -- my approach to this

Page 367

report was to outline the evidence for three solid programs that had a strong evidence base.
BY MS. WINNER:
Q. My question is --
A. I'm not sure what the best means. Can you --
Q. Well, the best evidence I think, is actually, what I asked you. Were those the ones that you thought had the best evidence?
A. Not necessarily. I think there's a combination of factors that one needs to use and that we use in public health when choosing what programs and policies to highlight in these types of contexts. One is the level of evidence. Another is the anticipated impact.
So I think, you know, among other reasons that one would focus on particular policies, I thought these three had both a solid evidence base and, specific to the counties, there was enough information to suggest that there

Page 368

would be an impact on the epidemic.
Q. Were there any other reasons other than the ones you just described why you selected these three?
A. I would say that evidence and impact were the -- the main reasons.
Q. Okay. Now, I'm pretty sure I know the answer to this question, but I'm going to ask it anyway.
In evaluating these measures did you -- did your analysis differentiate in any way between abatement measures that are needed for harms that can be traced back to prescription opioids versus those that are attributable solely to people whose abuse of heroin or other illicit opioids has nothing to do with prescription opioids?
MS. RELKIN: Objection to form.
You can answer if you can.
THE WITNESS: The case that I make in this report is that the

Page 369

increase in the supply of prescription opioids under -- was an underlying factor for the development of additional opioid epidemics, including the heroin epidemic creating a market, increasing the risk among users. And so, I would attribute -- in terms of the overall opioid epidemic, I don't see how one in a public health sense would differentiate between those two.
BY MS. WINNER:
Q. So you don't think that that's something that would be practical to do, to try to differentiate between those two categories?
A. That's not what I said. I don't think one -- I think that these epidemics are so intertwined in terms of their underlying causation, that it's not only -- the practicality of it is not the key aspect. It's the level of evidence for causation.

Page 370

Q. Now, remedial measures that are taken to address the kinds of problems that you've identified in your report are today taken by a variety of different actors, correct?
MS. RELKIN: Objection to form.
THE WITNESS: I don't know what you mean. Can you define remedial measures?
BY MS. WINNER:
Q. Well, you identify three, MAT --
A. So but -- I'm sorry. Can you define remediation, what you mean by that word.
Q. Well, let me change the word if that's giving you a problem. Abatement measures, does that make you feel more comfortable?
A. Sure. The three policies and programs that I talk about.
Q. Yes. The kinds of programs that you talk about are undertaken in the

Page 371

world by a variety of different actors, correct?
A. Can you describe what you mean by actors.
MS. RELKIN: Objection to form. Overbroad.
BY MS. WINNER:
Q. Well, for example there are some things that the federal government implements and pays for, correct?
A. Can you give me an example? I can't --
Q. You're not aware of any? Are you aware of anything in these categories that the federal government pays for?
A. I need -- I need some specifics in terms of what exactly you're referring to in order to answer that question.
Q. Are you aware of federal funding for MAT, for example?
A. There are reimbursement programs for different levels of

Page 372

treatment that vary across a wide variety of contexts.
Q. And that would include MAT, correct?
A. So as I've said, I am not sure what you mean by federal funding. There is federal funding for health insurance that is included in what I've outlined here.
Q. So federally funded health insurance pays for some of these measures, correct?
A. It depends on the -- on the context.
Q. Have you ever heard of grants that are made available to local governments to pay for MAT?
A. Again, I would need to see some specifics on a particular type of grant. Certainly there are a number of programs that are available to help individuals who are unfortunately addicted to opioids.
Q. And there's some things that

Page 373

are -- some abatement measures that are undertaken at the state level, correct?
A. I think that there are a broad range of institutions that can participate in reversing the opioid epidemic. What currently occurs in terms of the participation of institutions to reduce the impact of the opioid epidemic and what could possibly occur, -- what I'm addressing here is the evidence for these programs for their ability to reduce the opioid epidemic, and that's what's in the report.
Q. Okay. So would it -- based on what you just said, would it be fair to say that what you've done in your analysis, is try to identify needs without necessarily evaluating who would actually satisfy those needs?
A. I think what I was asked to do --
MS. RELKIN: Objection to form.
THE WITNESS: As an

Page 378

All right. So in Section F, this is one of the -- section -- the prior -- prior section you talk about -- generally about the efficacy of naloxone distribution. And then in Section F.5.1 you go on to talk about the need specifically in Cuyahoga County and Summit County, correct?

A. So the first part of Section F.5 provides an evidence base for the efficacy of naloxone in reversing potential failed consequences of an overdose. And also, in addition to that, the evidence base that -- that providing expanded access to naloxone also reduces overdose events. So it's really two different statements.

Q. But -- but that said, where you talk specifically about the -- trying to quantify needs in Cuyahoga County and Summit County for naloxone, that's Section F.5.1, correct?

A. That's correct.

Q. Okay. So -- and then you

Page 379

talk about, in that section, you give -- you make a number of different observations about -- about the numbers and the needs for naloxone.

But I want to focus just on the first instance, in the last paragraph, which is about naloxone administration kits in Cuyahoga County, correct?

A. Okay.

Q. And in there you say, a couple sentences down -- third sentence I think. This is in -- "This is in addition to medical first responders such as EMS who are trained to administer naloxone, available data indicate that in 2018 Cuyahoga County EMS administered naloxone at least 4,353 times."

And then you go on with the parenthetical about that. I'm -- I'm focused on this 4,353 number.

Does Cuyahoga County actually have EMS services at the county level?

Page 380

A. This statement was based on data that was provided to me.

Q. By whom?

A. By the counsel.

Q. Okay. So -- by counsel, you mean plaintiffs' counsel, not your counsel. We know that.

A. That's right.

Q. Yes. Okay.

So this came from plaintiffs' counsel, correct?

A. Yes.

Q. Okay. So am I correct that you don't actually know yourself whether Cuyahoga County provides EMS services?

A. I evaluated the -- the statement based on what was sent to me.

Q. Were you assuming, based on -- on the information that was provided to you by counsel, that Cuyahoga County itself was, in fact, providing EMS services?

A. Again, I think what I have in the report is pretty clear. You know,

Page 381

I was sent information -- I asked for information about, you know, providing an estimate of the potential impact in the county and that's the information that was provided to me. And that's what's in the report.

Q. So are you purporting here -- I don't want to use the word purporting. That isn't --

MS. RELKIN: Objection to form.

BY MS. WINNER:

Q. I don't -- that -- are you intending here to provide an opinion about the naloxone needs that exist for EMS in the city of Cleveland?

A. What I provided was the information that was given to me about the number of administered naloxone distribution based on the information that I was sent.

Q. My question though, are you offering any opinions through this report about abatement needs in the city of

Page 382

Cleveland, to be provided for by the city of Cleveland?
A. My understanding is the city of Cleveland is in Cuyahoga County; is that correct?
Q. That -- last I knew, yes.
A. So I would say that that is covered under the estimates that I have provided.
Q. If it were demonstrated to you that Cuyahoga County, in fact, does not provide EMS services, would that have any impact on the opinions that you provide in this paragraph?
A. I mean, you know, let's -- I'm -- I'm -- I keep an open mind to all available evidence. I think the point that I was making in this paragraph is that naloxone is a really important program to reduce overdose. And however it is distributed is how it should be distributed. So if there is new information that I could use, my opinion would not change. Just that distributing

Page 383

naloxone is an important thing to do in Cuyahoga County.
Q. Well, you have basically two sets of opinions about naloxone in -- in this report.
One set of opinions is about whether naloxone is a good and important thing to have out there. The other set of opinions is about specific numbers, and so I'm trying to focus on your opinions about specific numbers.
And so my question is: If -- if -- leaving aside the question of whether, you know it is important for naloxone to be available in the community, would your opinion about the specific needs of Cuyahoga County be affected if you knew that Cuyahoga County does not provide EMS services?
MS. RELKIN: Objection to form. Compound.
THE WITNESS: Again, I think I would -- I would respond to that by saying what I intended to

Page 384

convey in that paragraph was some assessment of the overall amount of distribution of naloxone that should occur.
If there are -- if new information comes to light about specific EMS services, you know, that estimate could be revised. But it doesn't change the overall.
That's one sentence in the overall paragraph about the estimated number of naloxone administration kits that I would estimate would be necessary.
So, sure, of course, I keep an open mind. If new information is available, I obviously want to present the most accurate picture that I can. But I think the opinion that I have doesn't change.
BY MS. WINNER:
Q. Do you distinguish in your opinion -- is there a difference in

Page 385

your -- let me start that again.
Is there a difference in your view between the amount of naloxone that is needed within Cuyahoga County as opposed to the amount that is needed by Cuyahoga County as a government entity?
MS. RELKIN: Objection to form.
THE WITNESS: I need more information on your differentiation.
BY MS. WINNER:
Q. So you can't answer my question without more information?
A. I don't understand your question.
Q. Okay. Let me ask you about your section about Summit County.
You have a similar paragraph, discussing naloxone administration kits in Summit County on the next page, correct?
A. Mm-hmm.
Q. And do you know -- and that

Page 386

includes, among other things -- there are other things in here. But one of the things that's in there is you have an estimate of the amount of naloxone that is needed for EMS in Summit County, correct?

A. So what I have in here is, "Data are not currently available to me regarding the total number of first responders in Summit County; however, the Akron Fire Department has a current work force of approximately 354 individuals, and there are 14 EMS/paramedics," and I have a citation that was provided to me.

"Available data indicate that in 2018 Summit County EMS administered naloxone at least 1,562 times. This is likely an underestimate because 81.8 percent of EMS agencies reported."

Q. Is there such a thing as Summit County EMS?

A. Again, I don't -- this is the information that was provided to me.

Page 387

If new information comes to light, it doesn't change my opinion that naloxone is very much needed in communities that have a high burden of opioid overdose.

Q. You say this was information that was provided to you. Again, was it provided to you by plaintiffs' counsel?

A. That's correct.

Q. You -- in what you just read, there's a reference to the Akron Fire Department.

A. Yes. The Akron Fire Department has a current --

Q. I don't need you to read it again. Is the Akron Fire Department an agency of the Summit County government?

A. This is the information that was provided to me. I can -- we can go to Reference 195 and look at the information.

I asked plaintiffs' counsel for information on these different workforce numbers. And these are the numbers that I relied on. Should new

Page 388

information come to light, again, the opinion is the opinion. I think providing an estimate for these specific counties is -- is what I was endeavoring to do in these paragraphs.

Q. Do you know whether the Akron Fire Department carries naloxone today?

A. That information was not provided to me.

Q. If -- well, I assume the answer is going to be the same. But let me just ask it.

Assuming that the Akron Fire Department does carry naloxone, do you know who pays for it?

A. In the -- I'm sorry, this pen is really leaking.

In the information that was provided to me, the source of funding for each individual naloxone kit was not included.

Q. Now, in Section C.3 of your report -- let's go back. It starts on

Page 389

Page 32. You provide estimates of the numbers of persons in each of these two counties who were currently living with opioid use disorder, correct? I'll direct you to the last paragraph on Page 32, the first sentence.

A. Yes. "While the number of individuals currently living with opioid use disorder in Cuyahoga and Summit Counties is unknown, I can provide an estimate of the number, given number the overdose deaths."

Q. And you -- is the estimate that you then -- and we'll walk through this. But is the estimate that you then go on to provide intended to be specifically an estimate of the number of individuals in each county who is currently living with opioid use disorder?

A. Depend -- so the paper that I relied onto make that assessment looked at individuals who were dependent or regular users of opioids.

Page 390

Q. Is that the same thing as people who have opioid use disorder?
A. So this is the information that I thought was important to gather an estimate of the number of individuals who would be in need of these services.
Q. But my question is --
A. It would be inclusive of opioid use disorder.
Q. But is opioid use disorder the same thing as being a dependent or regular user of opioid?
A. So the Degenhardt, et al., 2011 paper did not is assess opioid use disorder. The Degenhardt paper assessed dependent or regular users of opioids. And I used that paper to provide an estimate of the number of individuals in those counties who would be in need of these services, and would include individuals living with opioid use disorder.
Q. Is it limited to people who have opioid use disorder or is it

Page 391

broader?
A. The estimate is individuals who are dependent or regular users of opioids.
Q. Is that likely to be broader, narrower, or the same as the population of people with opioid use disorder?
A. Let's see. Individuals who are dependent, so -- and regular users of opioids. I would estimate that it's largely similar.
Q. How similar? Do you have a confidence interval or anything like that for that?
A. I would need to do a statistical analysis for that.
Q. Okay. I'd like to show you what's been previously marked as Exhibit 13 to your deposition, which I'm hoping is the article that you're talking about.
(Document marked for identification as Exhibit

Page 392

Keyes-13.)
BY MS. WINNER:
Q. And is Exhibit 13 in fact the article that you referred to a second ago as the one that you relied upon for this calculation?
A. So this article, just to be clear, is a random effect meta-analysis for the mortality, the crude and standardized mortality rates for individuals who are dependent or regular users of opioids.
Q. Okay.
A. And I relied on it for this assessment.
Q. Okay. And this is -- this is the article that you cite in this section of your report? I think it's --
A. I cite this article in this section of the report.
Q. And it is, I think, just for the record, this is Reference 151.
A. Let me just double-check that.

Page 393

Q. Sure.
A. Yes, it is Reference 151.
Q. What you pulled out of this report, am I correct -- well, first of all, let's just talk about what this is.
This is a -- and I don't want to go into every detail of it. But generally this is a review of multiple studies that evaluates their results on the subject of mortality, correct?
A. So the outcomes reported here are two outcomes. One is the crude mortality rate. And one is the standardized mortality rate for specific causes of death across studies that used inclusion criteria -- I'm sorry, that used exclusion criteria that included not reporting heroin or opioid users, opioid-related mortality, or not reported research data or case studies.
So that is what the design was, was a multiple search strategy to find studies that assessed mortality among regular and dependent users of

Page 398

that any one particular study, you might be over or slightly under due to random error or, you know, any number of different reasons. And so in a meta-analysis, what you do is take all the studies on a particular topic and then provide a summary estimate of them. That is the intention of the analysis.

Q. And -- and you would consider this an epidemiological -- I can never pronounce that word. You are obviously used to it.

For your field, this is an epidemiological study, or analysis, or review, or whatever the word would be? This is in your -- this comes from your field, this particular paper here?

A. I guess my question is, what do you mean by my field?

Q. Well, you are an epidemiologist, correct?

A. I am an epidemiologist, yes.

Q. And -- and is this a paper from epidemiology?

Page 399

A. I would say that this paper uses epidemiological studies in order to -- you know, meta-analysis is used -- a lot -- I wouldn't claim it for epidemiology. But this particular paper uses epidemiological data.

Q. So this -- am I correct that, that what this paper is finding is that there were .65 deaths per 100 person years during which the subjects of the studies were observed?

A. I'm sorry, I'm just going to go to the place where that is written.

Can you point again to the page number?

Q. Sure. Page -- it's -- we're on Page 45.

A. Sorry.

Okay. So what this study said in the results section is that "pooled estimates suggested that overdose related mortality was the most common specific cause at .65 deaths per 100,000 person years."

Page 400

So your question is?

Q. I'm just trying to translate that into more everyday English. Does that mean that --

A. If 100 people were observed for one year, you would expect there to be .65 overdose deaths.

Q. Thank you. That's helpful.

And that is the -- that .65 figure is the number that you then went on to use to apply to overdose statistics to estimate the populations in each of those -- these who had counties overdose related --

A. I used that as a -- and its related confidence interval, to provide an estimate of the number of dependent or regular users of heroin -- I mean of opioids.

Q. Now, the -- who are the -- the subjects of these studies? Is -- and I'm not asking you to list them all. Am I correct that they are described in the tables that -- the table that starts, I

Page 401

guess it's on Page 35, Table 1?

A. Okay. So Table 1 is included... studies investigating all cause mortality.

And so table 2 then is cohorts purporting proportion of deaths due to AIDS, overdose, suicide, and traumatic causes of death.

Q. I'm -- I'm more focused on the nature of the -- I think it's the nature of the sample column.

No, who -- who were the people who were in these studies?

MS. RELKIN: Objection. Form. Overbroad.

There's multiple studies. Do you want her to go through each one?

BY MS. WINNER:

Q. Do you see on Table 1 there's a column that says nature of sample?

A. So -- yeah, you know, again, I -- you really should look at Table 2,

Page 406

the report the way the methodology is used. The methodology that I used is standard practice in the epidemiological literature.

As far as any one particular study that has used this estimate in and of itself, I don't have a specific citation in the report. But it is a standard way to evaluate population sizes in the epidemiological literature.

BY MS. WINNER:

Q. Okay. But I want to follow up on what you just said. You don't have a specific -- I don't have a specific citation in the report, but it is a standard way to evaluate population sizes in the epidemiological literature.

I just want to focus -- when you say it is a standard way, are you talking about --

A. I'm talking about the method and not this particular number.

Q. Got it.

Page 407

MS. DO AMARAL: Counsel, is it a good time for us to take a break?

MS. WINNER: Sure, no problem.

THE VIDEOGRAPHER: The time is 4:18 p.m. Going off the record.

(Short break.)

THE VIDEOGRAPHER: The time is 4:32 p.m. Back on the record.

BY MS. WINNER:

Q. Okay. Before the break, we were discussing the calculations you did in Section C.3 of your report.

A. Yes.

Q. Correct?

And am I correct that you took this .65 per 100 person-year number, and you then applied that to the overdose deaths in 2013 in each of the two counties to estimate the opioid dependent or regular user population in each county?

Page 408

A. That's correct.

Q. And the overdose death statistics from those counties that you used included all drug overdoses, not just opioid overdoses, correct?

A. So just to be clear, that is -- the reason for that is because the Degenhardt meta-analysis looked at all drug overdose deaths among regular or dependent users. And so to provide a comparable analysis, I needed to use all drug overdose deaths in the counties.

Q. But those were all drug overdose -- okay. Strike that.

Let me try to streamline this a little bit. Let's go back to Degenhardt. Is that an appropriate way to refer to Exhibit 13. If you would turn back to the abstract. Near the bottom there is a sentence that reads, "A multi-variable regressions found the following predictors of mortality rates: Country of origin, the proportion of sample injecting, the extent to which

Page 409

populations were recruited from an entire country versus sub-national, and year of publication."

Did I read that correctly?

A. You read that statement correctly. I'd like to go just to the methods section to make sure that -- because sometimes in abstracts it's an oversimplification of what was done.

Q. Okay. Is there something inconsistent? I assume you studied this study fairly carefully before you used it.

A. I did study -- I did study it carefully, but with over 200 citations, I just want to be sure that we don't abstract something from an abstract that is defined more carefully in the paper itself.

Okay. So on page 43, I think they provide more information on study covariates. So the proportion of the sample injecting was included in the covariate as a continuous variable at a

Page 410

bivariable level. Study is conducted in countries low and middle income. Low case ascertainment. High percentage of sample injecting.

So yes.

Q. All right. Then there's a section called "Limitations" on Page -- starting on Page 46. I've seen a section entitled "Limitations" in a number of the studies that you've cited. Is that a common section to include in an article like this?

A. Yes.

Q. And what is the author generally -- what is the purpose of a Limitations section in a paper like this?

A. Generally, in epidemiological studies, the purpose of a limitations section is to provide the reader with any additional information that would aid in their interpretation of the paper and to provide an opportunity for the author to provide additional information on the robustness of their

Page 411

results to any particular limitation of the methods, data source, et cetera.

Q. Well, the first paragraph under limitations here says that, "The studies reviewed here differed considerably. The length of follow-up of the cohorts ranged from one to 36 years. This is problematic, because drug use can change over time period, and this can affect mortality rates."

I'll stop there.

Do you think that that is an accurate statement of a limitation of this review?

A. I would say that -- I would say that that is an accurate limitation of the review. But again, applying it in the way that I did in the report, I think you provide a confidence interval around the estimate. You know, that's the best available estimate for the rate of the standardized mortality ratio for a dependent user.

So I think that even though

Page 412

there is heterogeneity, to use that word again, there are differences in the length of follow-up of the cohorts from one to 36 years.

When you meta-analyze something, you're aggregating across all of that.

Q. Sometimes when you aggregate over a heterogenous set of data, you can gloss over variations, meaningful variations within the data, correct?

MS. RELKIN: Objection to form.

THE WITNESS: So anytime we provide, you know, this is what epidemiology does. We provide aggregate estimates of risk. We don't provide estimates at the individual level. So we're always aggregating to provide an assessment of risk factors.

You know, the overdose deaths in the counties are also an aggregate of a lot of individuals.

Page 413

BY MS. WINNER:

Q. But aggregation can be -- the reason heterogeneity is identified as a limitation here, is because, or at least in part because aggregate -- it means that aggregation can yield results that are less meaningful?

A. I don't necessarily think that that is -- it really depends on what the research question you're asking is and what you're using those data for, in terms of the meaningfulness of aggregation. Sometimes we want an aggregate estimate of the average risk of a certain outcome across the heterogenous subgroups that make up that average risk.

Q. Have mortality rates from overdose deaths in the drug using population changed over time?

A. Over what time period specifically?

Q. Over any time period over the last 20 years?

A. So specifically in the last,

Page 414

you know, three years since 2013, mortality rates have increased.
Q. And did mortality rates change in the time period before the last three years?
A. The mortality rates, the overall population mortality rate due to overdose has changed. Is your question about changes over -- can you be specific about the population with which you're asking the question.
Q. Okay. That's a fair question. Let's start with the overall population mortality rate has changed over time, has it not?
A. The overall population mortality rate of --
Q. For overdose?
A. For overdose has increased.
Q. Has the overall mortality rate varied over time before the past three years among opioid users?
A. You know, I would have to go to meta-analysis in order to answer that

Page 415

question.
You're asking about the United States?
Q. Yes.
A. So let's see if there are U.S. studies --
Q. Well, let me just ask, is that something you've looked at before I asked you that question just now?
A. What the variation over time -- so what I used as a meta-analysis that pooled data across a number of different studies. To the extent that there are U.S. studies involved in that particular estimate, I don't believe that there are, but I would like to just confirm.
So the meta-analysis used three different studies from North America, from the United -- no, I'm sorry, four different studies -- I apologize again. No, that's from Canada.
So there are a number of studies cited in here. One is based in

Page 416

California. One is based in Albuquerque. One is among Vietnam veterans. And overall it does not provide data on whether the overdose rate among those different populations have changed over time.
So as far as I know, you know, the -- the overdose rate among regular or dependent users of opioids in the United States has not been systematically investigated.
Q. Now, you do however have an opinion that the mortality rate has changed in the past three years because of the fentanyl problem?
A. The population mortality rate has.
Q. The population mortality.
Is that also true of the -- the opioid using population mortality rate?
MS. RELKIN: Objection to form.
THE WITNESS: So I'm sorry,

Page 417

your question is whether there is available data on the overdose rate from fentanyl among opioid users?
BY MS. WINNER:
Q. Let me -- let me -- let me take a step back and ask a different question.
If the -- some opioids, if abused, are more lethal than others, correct?
A. It depends on the amount, the dose, and the duration of use.
Q. But -- but in terms of --
A. I wouldn't make -- I just -- I wouldn't make a blanket statement about products and their overdose potential.
Q. Well, do you believe, based on the data you've seen that illicitly manufactured and sold fentanyl that's used to adulterate heroin and cocaine and other drugs, is -- contributes to more overdose deaths than abuse of Vicodin for example?